IN THE CLAIMS

Cancel claims 1-26, 52, 64-66.

Amend claims 28-35, 37-51, 53-63 and 68 to read:

28. The nucleotide sequence according to claim 27, encoding a polypeptide comprising substantially the amino acid sequence of residues 49 to 882 of the sequence shown in Figure 5.

29. The nucleotide sequence according to claim 27 or 28, comprising substantially the sequence of nucleotides 289 to 2790 of the sequence shown in Figure 5, or a functional equivalent thereof.

30. The nucleotide sequence according to claim 29, further comprising the sequence of nucleotides 145 to 288 of the sequence shown in Figure 5, or a functional equivalent thereof.

31. The nucleotide sequence according to claim 27, comprising the sequence of nucleotides 228 to 2855 of the sequence labelled psbe2con.seq in Figure 8, or a functional equivalent thereof.

32. The nucleotide sequence according to claim 27, comprising the sequence of nucleotides 57 to 2564 of the sequence labelled as psbe2con.seq in Figure 12, or a functional equivalent thereof.

33. The nucleotide sequence according to any one of claims 27 to 32, comprising an in-frame ATG start codon, and optionally including a 5' and/or a 3' untranslated region.

34. The nucleotide sequence according to claim 27, comprising the sequence of nucleotides 45 to 3200 of the sequence labelled as psbe2con.seq in Figure 8, or a functional equivalent thereof.

35. A nucleic acid construct comprising a sequence in accordance claim 27.

37. A host cell into which has been introduced a sequence in accordance with claim 27.

38. An effective portion of a class A SBE polypeptide obtainable from potato plants and encoded by a nucleotide sequence in accordance with claim 27.

39. The polypeptide according to claim 38, comprising substantially the sequence of amino acids 49 to 882 of the sequence shown in Figure 5, or a functional equivalent thereof.

40. The polypeptide according to claim 38, comprising the sequence of amino acids 1 to 48 of the sequence shown in Figure 5.

41. The polypeptide in accordance with claim 38 in substantial isolation from other plant-derived constituents.

42. A method of altering the characteristics of a plant, comprising introducing into the plant a portion of a nucleotide sequence in accordance with claim 27, operably linked to a

suitable promoter active in the plant, so as to affect the expression of a gene present in the plant.

43. The method according to claim 42, wherein the nucleotide sequence is operably linked in the anti-sense orientation to a suitable promoter active in the plant.

44. The method according to claim 42, wherein the introduced sequence comprises at least one region selected from the group consisting of a 5' untranslated region, a 3' untranslated region, and a coding region of the potato SBE class A starch branching enzyme operably linked in the sense orientation to a promoter active in the plant, so as to cause sense suppression of an enzyme naturally expressed in the plant.

45. The method according to claim 42, further comprising introducing into the plant one or more further sequences.

46. The method according to claim 45, wherein one or more of the further sequences are operably linked in the anti-sense orientation to a suitable promoter active in the plant.

47 The method according to claim 45, wherein the further sequence comprises a portion of a class B SBE nucleotide sequence.

48. The method according claim 42 or 47, effective in altering the starch composition of a plant.

49. A plant or plant cell having characteristics altered by the method of claim 42 or 47, or the progeny of such a plant, or part of such a plant.

50. The plant according to claim 49, selected from one of the following: potato, pea, tomato, maize, wheat, rice, barley, sweet potato, and cassava.

51. A tuber or other storage organ from a plant according to claim 49.

53. The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has an elevated viscosity onset temperature as judged by viscoamylograph conducted according to the protocol defined in claim 7, compared to starch extracted from a similar, but unaltered, plant.

54. The plant according to claim 53, wherein the viscosity onset temperature is elevated by an amount in the range of 10 to 25^{o}C.

55. The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has a decreased peak viscosity as judged by viscoamylograph conducted according to the protocol defined in claim 7, compared to starch extracted from a similar, but unaltered, plant.

56. The plant according to claim 55, wherein the peak viscosity is decreased by an amount in the range of 240 to 700 SNUs.

57. The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has an increased pasting viscosity as judged by viscoamylograph conducted according to the protocol defined in claim 7, compared to starch extracted from a similar, but unaltered, plant.

58. The plant according to claim 57, wherein the pasting viscosity is increased by an amount in the range of 37 to 260 SNUs.

59. The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has an increased set-back viscosity as judged by viscoamylograph conducted according to the protocol defined in claim 7, compared to starch extracted from a similar, but unaltered, plant.

60. The plant according to claim 59, wherein the set-back viscosity is increased by an amount in the range of 224 to 313 SNUs.

61. The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has a decreased set-back viscosity as judged by viscoamylograph conducted according to the protocol defined in claim 7, compared to starch extracted from a similar, but unaltered, plant.

62. The plant according to claim 49, containing starch which, as extracted from the plant by wet milling at ambient temperature, has an elevated apparent amylose content as judged by iodometric assay according to the method of Morrison & Laignelet, compared to starch extracted from a similar, but unaltered, plant.

63. The plant according to claim 49, containing starch which, as extracted from the plant, has a phosphorus content in excess of 200mg/100grams dry weight starch.

68. A potato plant or part thereof which, in its wild type possesses an effective SBE A gene, but which plant has been altered such that there is no effective expression of an SBE A polypeptide within the cells of at least part of the plant, wherein the alteration is effected by a method according to claim 42 or 47.

Add new claims 69-74 to read:

-- 69. A foodstuff comprising the starch of claim 1.

70. The foodstuff of claim 69, wherein the starch provides a film, barrier, or coating.

71. The foodstuff of claim 69, wherein the starch is a gelling agent.

72. A composition comprising the starch of claim 1, wherein the composition is selected from the group consisting of a biodegradable product, a packaging material, a glass fiber, and a textile.

73. The nucleotide sequence of claim 33, further comprising a 5' and/or a 3' untranslated region.

74. A food stuff comprising a tuber or other storage organ according to claim 51. --